## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

## **LISTING OF CLAIMS:**

1. (Currently Amended) A computer system for analyzing text in one or more electronic documents, comprising:

one or more system interfaces; and

an affix process that determines one or more affixes of one or more words in one or more of the documents and provides the affixes to the system interface, said process comprising obtaining a collection of words, representing all of the words in the collection as Patricia trees to show visually morphological structures of the words to facilitate identifying potential candidates of prefixes and suffixes from the words in the collection, including using the words to construct first and second tries, each of the tries having a multitude of paths and a multitude of nodes, each of the nodes being connected to one or more of the other of the nodes, and compressing the first and second tries by compressing all unary paths on the tries to form a prefix Patricia tree and a suffix Patricia tree, including adding the words into the prefix Patricia Tree, using the prefix Patricia Tree to identify a set of candidate prefixes from the words in the collection, reversing each of the words, adding the reversed words into the suffix Patricia Tree, using the suffix Patricia Tree to identify a set of candidate suffixes from the words in the collection, refining the sets of candidate prefixes and suffixes to identify actual prefixes and suffixes, including using

knowledge of prefixes previously identified in said refining to further refine the set of candidate suffixes, and using knowledge of suffixes previously identified in said refining to further refine the set of candidate prefixes.

- 2. (Original) A system, as in Claim 1, where one or more of the affixes are nested affixes, each nested affix comprising one or more affixes.
- 3. (Original) A system, as in Claim 1, where the affix process determines one or more suffixes of one or more of the words.
- 4. (Original) A system, as in Claim 3, where one or more of the suffixes are nested suffixes, each nested suffix comprising one or more suffixes.
- 5. (Original) A system, as in Claim 1, where the affix process determines one or more infixes of one or more of the words.
- 6. (Original) A system, as in Claim 5, where one or more of the infixes are nested infixes, each nested infix comprising one or more infixes.
- 7. (Original) A system, as in Claim 1, wherein the affix process determines one or more prefixes of one or more of the words.
- 8. (Original) A system, as in Claim 7, wherein one or more of the prefixes are nested prefixes, each nested prefix comprising one or more prefix.

- 9. (Original) A system, as in Claim 1, where the interface compiles a list of affixes that are in one or more of the documents.
- 10. (Original) A system, as in Claim 1, where the affixes are not listed in a dictionary that is accessible to the system.
- 11. (Original) A system, as in Claim 1, where the system interface is any one or more of the following: a graphical user interface, a print out, an interface to a text analysis system.
- 12. (Cancelled)
- 13. (Currently Amended) A method for analyzing text in one or more electronic documents, comprising the steps:

using a computer system to perform an affix process that determines one or more affixes of one or more words in one or more of the electronic documents; and

providing the determined one or more of the affixes to an interface of the computer system for display to a user; and wherein:

the step of using the computer system includes the steps of obtaining a collection of words, representing all of the words in the collection as Patricia trees to show visually morphological structures of the words to facilitate identifying potential candidates of prefixes and suffixes from

the words in the collection, including using the words to construct first and second tries, each of the tries having a multitude of paths and a multitude of nodes, each of the nodes being connected to one or more of the other of the nodes, and compressing the first and second tries by compressing all unary paths on the tries to form a prefix Patricia tree and a suffix Patricia tree, including adding the words into the prefix Patricia Tree, using the prefix Patricia Tree to identify a set of candidate prefixes from the words in the collection, reversing each of the words, adding the reversed words into the suffix Patricia Tree, using the suffix Patricia Tree to identify a set of candidate suffixes from the words in the collection, refining the sets of candidate prefixes and suffixes to identify actual prefixes and suffixes, including the step of using knowledge of prefixes previously identified in said refining step to further refine the set of candidate suffixes, and using knowledge of suffixes previously identified in said refining to further refine the set of candidate prefixes.

- 14. (Original) A method according to Claim 13, wherein at least one of the affixes is a nested affix including a plurality of affixes.
- 15. (Original) A method according to Claim 13, further comprising the step of, said interface compiling a list of the determined one or more affixes.

Claim 16. (Cancelled).

Claim 17. (Cancelled).

Claim 18. (Cancelled).

- 19. (Previously Presented) A method according to Claim 13, wherein the step of using the computer system includes the further step of counting stems, which meet defined criteria, for the affixes for the words in said set of words.
- 20. (Previously Presented) A method according to Claim 13, wherein the step of using the computer system includes the further step of disambiguating at least some of the potential affixes to identify nested affixes.
- 21. (Currently Amended) A <u>tangible</u> program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for analyzing text in one or more electronic documents, said method steps comprising:

using a computer system to perform an affix process that determines one or more affixes of one or more words in one or more of the electronic documents; and

providing the determined one or more of the affixes to an interface of the computer system for display to a user; and wherein:

the step of using the computer system includes the steps of obtaining a collection of words, representing all of the words in the collection as Patricia trees to show visually morphological structures of the words to facilitate identifying potential candidates of prefixes and suffixes from the words in the collection, including using the words to construct first and second tries, each of the tries having a multitude of paths and a multitude of nodes, each of the nodes being connected

compressing all unary paths on the tries to form a prefix Patricia tree and a suffix Patricia tree, including adding the words into the prefix Patricia Tree, using the prefix Patricia Tree to identify a set of candidate prefixes from the words in the collection, reversing each of the words, adding

to one or more of the other of the nodes, and compressing the first and second tries by

the reversed words into the suffix Patricia Tree, using the suffix Patricia Tree to identify a set of

candidate suffixes from the words in the collection, refining the sets of candidate prefixes and

suffixes to identify actual prefixes and suffixes, including the step of using knowledge of

prefixes previously identified in said refining step to further refine the set of candidate and

suffixes, and using knowledge of suffixes previously identified in said refining to further refine

the set of candidate prefixes.

22. (Original) A program storage device according to Claim 21, wherein at least one of the

affixes is a nested affix including a plurality of affixes.

23. (Original) A program storage device according to Claim 21, further comprising the step

of, said interface compiling a list of the determined one or more affixes.

Claim 24. (Cancelled).

Claim 25. (Cancelled).

Claim 26. (Cancelled).

- 27. (Previously Presented) A program storage device according to Claim 21, wherein the step of using the computer system includes the further step of counting stems, which meet defined criteria, for the affixes for the words in said set of words.
- 28. (Previously Presented) A program storage device according to Claim 27, wherein the step of using the computer system includes the further step of disambiguating at least some of the potential affixes to identify nested affixes.
- 29. (Currently Amended) A method according to Claim 13, wherein the step of using the computer system includes the further steps of:

disambiguating some of the affixes; and

generating new affixes from the disambiguated affixes; and wherein

a plurality of the affixes include non-alphabetic characters including digits and hyphens.

30. (New) The method according to Claim 13, wherein:

the prefix Patricia tree includes a multitude of internal nodes and strings for the internal nodes;

the suffix Patricia tree includes a multitude of internal nodes and strings for the internal nodes of the suffix Patricia tree; in the prefix Patricia tree, all the strings for the internal nodes of the prefix Patricia tree are potential prefixes; and

in the suffix Patricia tree, all the strings for the internal nodes of the suffix Patricia tree are potential suffixes.